

CLAIMS

1. A booth for accommodating a person, the booth defining a booth volume and comprising:

5 a base portion and a top portion;

flow means for causing air to move in a downward air flow within the booth, the downward airflow defining a predetermined volume within the booth;

recirculating means for recirculating the air within the booth;

10 filtering means for filtering the air within the booth; and

projecting means for projecting a product into at least some of the booth volume and onto a body of a person positioned in the booth.

2. A booth according to Claim 1, further comprising temperature means
15 for controlling the temperature of air circulating within the booth.

3. A booth according to Claim 2 wherein the temperature means maintains the air flow to be maintained at about 29°C to 30°C.

20 4. A booth according to Claim 2, wherein the temperature means maintains the air flow at about 33°C.

5. A booth according to Claims 2, 3 or 4 wherein the temperature means comprises a heater.
25

6. A booth according to any one of the preceding claims wherein the flow means comprises a first plenum of positive pressure located in the top portion of the booth, and a second plenum of negative pressure located in the base of the booth.
30

7. A booth according to Claim 6 wherein the first plenum pressurises air to a pressure in excess of ambient pressure, and the second plenum depressurises air to less than atmospheric pressure.

5 8. A booth according to Claim 6 or Claim 7 further comprising one or more air input grills associated with the first plenum and one or more foot grates associated with the second plenum.

9. A booth according to any one of Claims 6, 7 or 8 wherein the first
10 and second plenums are connected to one another via a duct.

10. A booth according to Claim 9 wherein the duct comprises a plurality of duct sections.

15 11. A booth according to any one of the preceding claims wherein the recirculating means comprises a fan.

12. A booth according to Claim 9 or any claim dependent thereon,
wherein the recirculating means is located within the duct.

20

13. A booth according to Claim 12 wherein the recirculating means has a maximum cross-sectional dimension, and the duct has a maximum cross-sectional dimension which is substantially greater than the cross-sectional dimension of the recirculating means.

25

14. A booth according to any one of the preceding claims wherein the filter means comprises a first filter for filtering wet particulate material.

15. A booth according to any one of the preceding claims wherein the filter means comprises a second filter comprising a low impedance filter for filtering wet particulate material.

5 16. A booth according to any one of the preceding claims wherein the filter means comprises a third filter comprising a second low-impedance filter for filtering dry particulate material.

10 17. A booth according to any one of the preceding claims, wherein the filter means comprises a fourth filter comprising a relatively high impedance filter.

15 18. A booth according to Claim 17 when dependent on Claim 8 or any claim dependent thereon wherein the fourth filter is associated with one or more of the input grills.

19. A booth according to Claim 17 or Claim 18 wherein the fourth filter has an impedance that varies across the filter.

20 20. A booth according to any one of the preceding claims wherein the filter means comprises a fifth filter comprising a first filter component comprising a relatively high impedance filter, and a second filter component comprising a combined mechanical and electrostatic filter.

25 21. A booth according to any one of the preceding claims wherein the product comprises a cosmetic product.

22. A booth according to any one of the preceding claims wherein the cosmetic product is a sunless tanning product.

23. A booth according to any one of the preceding claims wherein the predetermined volume comprises a portion of the booth volume.

24. A booth according to any one of the preceding claims wherein the projecting means comprises a hand held tool.

25. A booth according to Claim 24 wherein the hand held tool comprises an air gun.

26. A booth according to Claim 25 where the hand held tool comprises an airless sprayer.

27. A booth according to any one of Claims 1 to 23 wherein the projecting means comprises a remotely operable tool.

28. A booth according to Claim 27 wherein the remotely operable tool comprises a plurality of nozzles adapted to project the product into the predetermined volume.

29. A booth according to Claim 28 wherein the remotely operable tool further comprises adjustment means for adjusting the height of the nozzles.

30. A booth according to Claim 29 wherein the adjustments means additionally adjusts the attitude of the nozzles.

31. A booth according to any one of Claims 27 to 30 wherein the remotely operable tool comprises a nozzle support defining a substantially arcuate shape, the nozzles being positioned to spray the product into an area defined by the nozzle support.

32. A booth according to any preceding claim comprising a remotely operable tool with means to automatically transport the tool to provide spraying between two zones in the booth.

5 33. A booth according to Claim 32 wherein the automatic transport means comprises at least one slider unit moveable vertically between two positions, the slider unit supporting at least one spray means.

10 34. A booth according to any preceding claim comprising spray guns which are directed to spray product horizontally and/or at an angle to the horizontal (whether upwardly or downwardly) and/or some combination of these.

15 35. A tool according to any one of Claims 24 to 31.

36. A control system for a booth having projecting means for projecting a product onto the booth volume within the booth, the control system comprising operating means to operate the projecting means in selected regions of the booth volume.

20 37. A control system according to Claim 36 wherein the system is operable on the projecting means to project specified amounts of the product in selected regions of the booth volume, the specified amounts vary from zero to maximum flow of the product from the projecting means.

25 38. A control system according to Claim 36 or Claim 37 wherein the control system is operable on the projecting means to be moveable along a path within the booth, and the control system operates the projecting means as it moves along the path in accordance with predetermined instructions.

30

39. A method for applying a product to a human body using a booth as claimed in any one of Claims 1 to 31.

5 40. A method for applying a product to a human body using the tool of Claim 35.

41. A method for applying a product to a human body comprising the steps of:

10 causing air to flow in a downward direction onto the human body;
recirculating the air flowing onto the human body;
filtering the air to remove wet and dry particulate material;
projecting a product onto the human body.

15 42. A method according to Claim 41 further comprising the step of controlling the temperature of the air flow onto the human body.

43. A computer programme product directly loadable into the internal memory of a digital computer, comprising software code portions for
20 performing the steps of the method of Claim 41 or Claim 42.

44. A booth substantially as herein before described with reference to the accompanying drawings.

25 45. A tool substantially as herein before described with reference to the accompanying drawings.

46. A method substantially as herein before described with reference to the accompanying drawings.